



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,685	02/05/2002	Dana W. Seniff	P48-1305-1	8778
7590 02/24/2006			EXAMINER	
McCormick, Paulding & Huber City Place II 185 Asylum Street Hartford, CT 06103-3402			PRONE, JASON D	
			ART UNIT	PAPER NUMBER
			3724	
DATE MAILED: 02/24/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,685

Applicant(s)

SENIFF ET AL.

Examiner

Jason Prone

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Logan (5,277,736).

In regards to claim 1, Logan discloses the invention including providing sheet-type work material (11) having a laminated construction wherein a layer of flexible material is coupled to a carrier layer of semi-rigid material (Fig. 7), providing a cutting apparatus (40) having a cutting surface (Fig. 3), a reference surface (102), a drive means for moving the work material relative to the cutting surface (14) in response to command signals generated by a controller coupled to the cutting apparatus (7), a cutter head positioned adjacent to the cutting surface for movement in response to the command signals (48), a cutting blade coupled to the cutter head (46), the cutting blade is positionable between a non-working position wherein the cutting blade is located adjacent the work material (Fig. 1), and a working position wherein the cutting blade engages the work material (Fig. 3).

Logan further discloses the invention including programming the controller with graphic cutting data and carrier layer cutting data (Fig. 8), presenting the coating blanket material to the cutting apparatus such that the carrier layer engages the cutting

Art Unit: 3724

surface (Fig. 2), causing the drive means to move the coating blanket material back and forth over the cutting surface in response to the command signals issued from the controller (Fig. 1), moving the cutter head and the cutting blade between the non-working and working positions to selectively cut through portions of said flexible layer in a single pass during a cutting operation (Fig. 1), moving the cutter head during a cutting operation in response to the command signals generated by the controller that considers the reference surface during the cutting operation (Fig. 4), causing the blade to make multiple cutting passes along lines of cut defined by command signals issued from the controller in accordance with the carrier layer cutting data (Fig. 1 and 116), thereby selectively cutting through portions of the carrier layer (Fig. 11a), removing the coating blanket material from the cutting apparatus (Fig. 12), and separating a coating blanket from the coating blanket material along the lines of cut (Fig. 9).

In regards to claim 2, Logan discloses the invention including causing the blade to engage the carrier layer (46), moving the blade in accordance with command signals issued from the controller such that a tip portion thereof touches a reference surface located on the cutting apparatus (102), sensing the location of the tip portion and the blade upon touching the reference surface (104), storing the sensed location of the cutting blade and tip portion relative to the reference surface in the controller (104) and adjusting an amount by which the tip portion of the cutting blade extends into the work material in accordance with the sensed location (26).

In regards to claim 3, Logan discloses the invention including the cutting apparatus includes a frame (2) and the cutting surface is defined by a roller coupled for

Art Unit: 3724

rotation to the frame (65), the cutter head is movable along a longitudinal direction defined by the roller in response to the command signals issued from the controller (Fig. 1), wherein the step of causing the blade to engage the carrier layer further includes creating a plurality of first spaced apart slits extending through the carrier layer along a first pair of opposing edges which in part define the periphery of the coating blanket (19), and a first pair of opposing edges being approximately perpendicular to a longitudinal axis defined by the roller (Fig. 11b).

Logan discloses the invention including creating a plurality of second spaced apart slits extending through the carrier layer along a second pair of spaced apart opposing edges approximately parallel to the longitudinal axis and approximately perpendicular to the first pair of opposing edges (19), the first and second pairs of opposing edges together define the periphery of the coating blanket (Fig. 9), the second spaced apart slits allow the work material to overhang the roller as it is advanced thereover without the semi-rigid nature of the carrier layer causing the coating blanket to separate from the work material (Fig. 1).

In regards to claim 5, Logan discloses scoring the carrier sheet, via multiple passes (116), in accordance with the carrier sheet cutting data portions (Fig. 11b)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Nelson (4,624,169). Logan discloses the invention but fails to disclose sensing the amount of pressure exerted by the cutting blade in a direction approximately normal to the work material, adjusting the pressure a desired amount to cut through the flexible layer in a single pass and into the carrier layer on each of the multiple cutting pass. Nelson teaches sensing the amount of pressure exerted by the cutting blade in a direction approximately normal to the work material, adjusting the pressure a desired amount to cut through the flexible layer in a single pass and into the carrier layer on each of the multiple cutting pass (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Logan with the characteristics taught by Nelson to allow for greater longevity of the cutting blade.

Response to Arguments

5. Applicant's arguments filed 10 January 2006 have been fully considered but they are not persuasive. Logan clearly teaches a method of making multiple passes (116 in Figure 8). Logan discloses a cutting tool (46) and Nelson teaches that it is old and well known to provide a cutting tool with a pressure sensor. The different intended uses of the structures do not make the two references non-analogous but teach a controlled cutting apparatus. With respect to Nelson and using page 7 of this Office action, contact between the blade and the work piece will create two forces. A first force or left blade force (BF) that is put on the work piece by the blade. The pressure sensor does not detect this force. A counter second force or right normal force (N) is put on the blade from the work piece that will be detected. This force will run along the pointed

edge of the blade parallel with shaft 104. The change in angle of the blade will change the exact position of the two forces but will not change the direction of the forces. The force, regardless of the orientation of the blade will always run parallel to shaft 104 or normal to the cutting apparatus.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is (571) 272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

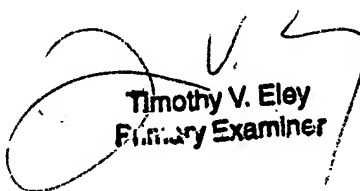
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JP
February 16, 2006



Timothy V. Eley
Primary Examiner

